REMARKS

Entry of the amendments is respectfully requested. Claim 1 has been amended. Claims 1-20 are pending in the application. Favorable reconsideration and allowance of this application is respectfully requested in light of the foregoing amendments and the remarks that follow.

1. 35 USC 112 Issues

An amendment has been made to claim 1 to clear up the Examiner's question with respect to the same and also dependent claims 2-11.

2. 35 USC 103 Issues

To establish a *prima facie* case of obviousness, three basic criteria must be met. First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings. Second, there must be a reasonable expectation of success. Finally, **the prior art reference (or references when combined) must teach or suggest all the claim limitations**. The teaching or suggestion to make the claimed combination and the reasonable expectation of success must both be found in the prior art, and not based on Applicant's disclosure. *In re Vaeck*, 947 F.2d 488, 20 USPQ2d 1438 (Fed. Cir. 1991).

In the Office Action mailed 8/02/06, it appears that the Examiner has done nothing more than regurgitate the previous action. This is despite the fact that significant amendments were made to the claims, e.g., including the addition of the term "consolidation."

Moreover, it is submitted that "consolidation" is term of art, indicating that the pressed materials are uniformly solid having no air bubbles like the cited '121 reference to Toray. See attached Declaration Allan R. Hutchinson, one of ordinary skill in the art.

Ironically, the Examiner also states that the arguments with respect to claims 1-17 are moot in view of the new grounds of rejection (again no new real grounds of rejection were made on claims 1-17). This seems to be a convenient way for the Examiner to ignore the Applicant's

attempts to focus the Examiner's attention on the patentable subject matter. As such, the Applicant's respectively request that Examiner carefully review the arguments made in March 29, 2006 response.

Further, new claim 18 depends from claim 1, new claim 19 from claim 12, and new claim 20 depends from independent claim 17. Each of these claims adds limitations that are not shown or suggested in the cited art, e.g. the heating and pressing of the product, the 0 degree and 90 degree lay up, and intermediate surface flame treatment. In fact, the Examiner does not address these limitations directly in the 8/02/06 action but rather lumped these claims into the rejection of the claim on which they depend. However, the Applicant would like to remind the Examiner of his duty to ensure that the prima facie case for obvious is met and that each and element claimed is in fact present in the cited prior art.

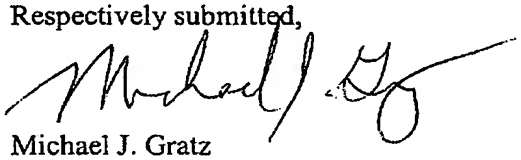
As the Examiner's *prima facie* case is deficient in that the prior art references do not teach or suggested all of the claim limitations in the amended claims and at least for the other above stated reasons, reconsideration of the amended claims is respectfully requested.

Conclusion

It is submitted that pending claims 1-20 are in compliance with 35 U.S.C. §§ 112 and 103 and each defines patentable subject matter. Reconsideration by the Examiner, withdrawal of the rejections, and allowance of the application are therefore believed in order and are respectfully requested.

No fees are believed to be payable with this communication. Nevertheless, should the Examiner consider any fees to be payable in conjunction with this or any future communication, the director is authorized to charge any fee or credit any overpayment to Deposit Account No. 50-1170. If the Examiner has any further questions or concerns, the Examiner is encouraged to contact the undersigned at the telephone number listed below.

Respectively submitted,



Michael J. Gratz
Registration No. 39,693
mjg@boylefred.com

Dated: Oct. 2, 2006

Customer Account No.: 23598
Boyle, Fredrickson, Newholm, Stein & Gratz, S.C.
250 Plaza Building, Suite 1030
250 East Wisconsin Avenue
Milwaukee, WI 53202
Telephone: (414) 225-9755
Facsimile: (414) 225-9753

IN THE UNITED STATES PATENT & TRADEMARK OFFICE
GROUP ART UNIT 1774

Applicant:	BIRRELL, Michael Ian
Assignee:	B.I. Group Limited
Appln No:	10/757,079
Filed:	January 14, 2004
For:	MULTILAYER PRODUCT MADE OUT OF A SUBSTRATE AND ON EITHER SIDE AT LEAST ONE COVERING LAYER; PROCESS FOR THE MANUFACTURE OF A MULTILAYER PRODUCT AND PAINTED MULTILAYER PRODUCT AND PROCESS FOR PAINTING A MULTILAYER PRODUCT
Examiner:	DIXON, Merrick L.

DECLARATION

Honourable Commissioner of Patent & Trade Marks.

Sir,

Professor Allan R Hutchinson BSc PhD CEng MICE declares as follows:

1. That he is Professor Allan R Hutchinson BSc PhD CEng MICE who is Professor at Oxford Brookes University School of Technology and has extensive knowledge of composite materials with experience including teaching the subject at undergraduate level, research project activities and travel throughout Europe to institutions that use composite materials.

2. That he has read the present application, the Office Action dated August 02, 2006, European Patent Publication number EP0 259 121("Toray Industries, Inc") and US Patent Number 6 770 360 ("Mientus") cited by the Examiner on the present application.

3. That Toray Industries, Inc discloses a composite material primarily suitable for inclusion in the multilayer makeup of skis, 'ping pong' rackets and musical instruments. From this it will be seen that the material lay-up in which it is incorporated is most normally a combination of resin based materials which are predominantly based on thermoset resins, but which may also include thermoplastics.
In all cases the patent EP0259121 requires that the core material used is porous and it is stated that the density of the porous layer may be 0.6g/cm^3. The invention shows how the porosity of the core can be controlled and the fibres held in place more effectively with a carbonized binder.

There is further reference to the requirement for the porous layer in patent EP0259121, which creates light weight and 'damping' properties.

By contrast the BI Group submission requires that the material is fully consolidated with no air encapsulation (in the aircraft industry panels are scanned to detect the degree of consolidation and rejected with tiny air pockets; indeed, porous panels have generally been a source of problems historically in aircraft structures). This ensures a good surface finish for painting and optimises the structural strength of the panel.

4. That nowhere in Toray Industries, Inc can be find a mention or suggestion of a thermoplastic resin that is similar in the core and outer layers, such that the materials have a similar melting point and merge together when in a molten state.
If we look at the main attributes of the BI Group submission, combining fibre reinforcements in a single polymer base, to improve mouldability, dimensional stability and paintability, none of these problems are addressed by patent EP0259121. However, those who have been skiing and understand a little of how skis are made will quickly understand what patent EP0259121 is attempting to achieve.

5. Furthermore it is a prerequisite of the BI Group submission that there should be no porosity in the core and, as a fully consolidated fibre reinforced material, the density would be around 1.4 g/cm^3 with glass and even over 1 g/cm^3 with carbon fibre.

6. That, before this invention was made, it would not have been obvious to the man skilled in the art that one could produce a single polymer panel with skins in continuous unidirectional fibre reinforcement for dimensional stability and finish, whilst the core has random fibres to improve formability; he considers this realisation not to be obvious.

The undersigned hereby declares that all statements made herein of his own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made in the knowledge that wilful false statements and the like so made are punishable by fine or imprisonment or both, under Section 1001 of Title 18 of the United States Code, and that such wilful false statements may jeopardise the validity of the application or any patent issued thereon.

Signed ..... Date: 29 September 2006

Professor Allan R Hutchinson BSc PhD CEng MICE